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WATER SUPPLY OUTLOOK

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

for

UTAH

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE.

and

STATE ENGINEER of UTAH

In cooperation with U.S. Forest Service, Bureau of Reclamation, Utah Fish and Game Dept., Utah Agricultural Experiment Station, U.S. National Park Service, U.S. Geological Survey; and other Federal, State, and private organizations.

MAY 1, 1964

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 2807, Portland, Oregon 97208.

PUBLISHED BY SOIL CONSERVATION SERVICE

	POBLISHED BY SOIL	CONSERVATION SERVICE	
REPORTS	LSSUED	LOCATION	COOPERATING WITH
RIVER BASINS			
VESTERN UNITED STATES	MONTHLY (FEBMAY)	PORTLAND, OREGON	ALL COOPERATORS
BASIC DATA SUMMARY	OCTOBER 1	PORTLANO, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MARMAY)	PALMER. ALASKA	_ ALASKA S.C.D.
AR I ZON A	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORAGO ANO NEW MEXICO	MONTHLY (FEBMAY)	FORT COLLINS, COLORAGO	- COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
ТОАНО	MONTHLY (JANJUNE).	BOISE, IOAHO	_ loano State Reclamation Engineer
MONTANA	MONTHLY (JAN JUNE).	BOZEMAN. MONTANA	MONT. AGR. EXP. STATION
NEVAOA	MONTHLY (JANMAY)_	RENO, NEVAOA	NEVAGA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
ORE GON	MONTHLY (JANJUNE)_	PORTLANO, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN JUNE)	SALT LAKE CITY, UTAH	_ UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB JUNE).	SPOKANE. WASHINGTON	_ WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEBJUNE)	CASPER, WYOMING	_ WYOMING STATE ENGINEER
	PUBLISHED 6	BY OTHER AGENCIES	
REPORTS	ISSUED		AGENCY
SRITISH COLUMBIA	MONTHLY (FEBJUNE)		S SERVICE, DEPT. OF LANOS, RESOURCES, PARLIAMENT BLOG., CANADA
CALIFORNIA	MONTHLY (FEBMAY)	CALIF. DEPT. OF	WATER RESOURCES, P.O. Box 388,

WATER SUPPLY OUTLOOK

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS for UTAH

MAY 1, 1964

Report prepared by

GREGORY L. PEARSON, Snow Survey Supervisor and

GARRY DINSDALE, Asst. Snow Survey Supervisor

SOIL CONSERVATION SERVICE SNOW SURVEY SECTION 125 SOUTH STATE SALT LAKE CITY UTAH 84111

Issued by

WAYNE D. CRIDDLE
STATE ENGINEER
STATE OF UTAH
SALT LAKE CITY, UTAH

J.A. LIBBY

STATE CONSERVATIONIST

SOIL CONSERVATION SERVICE
SALT LAKE CITY, UTAH

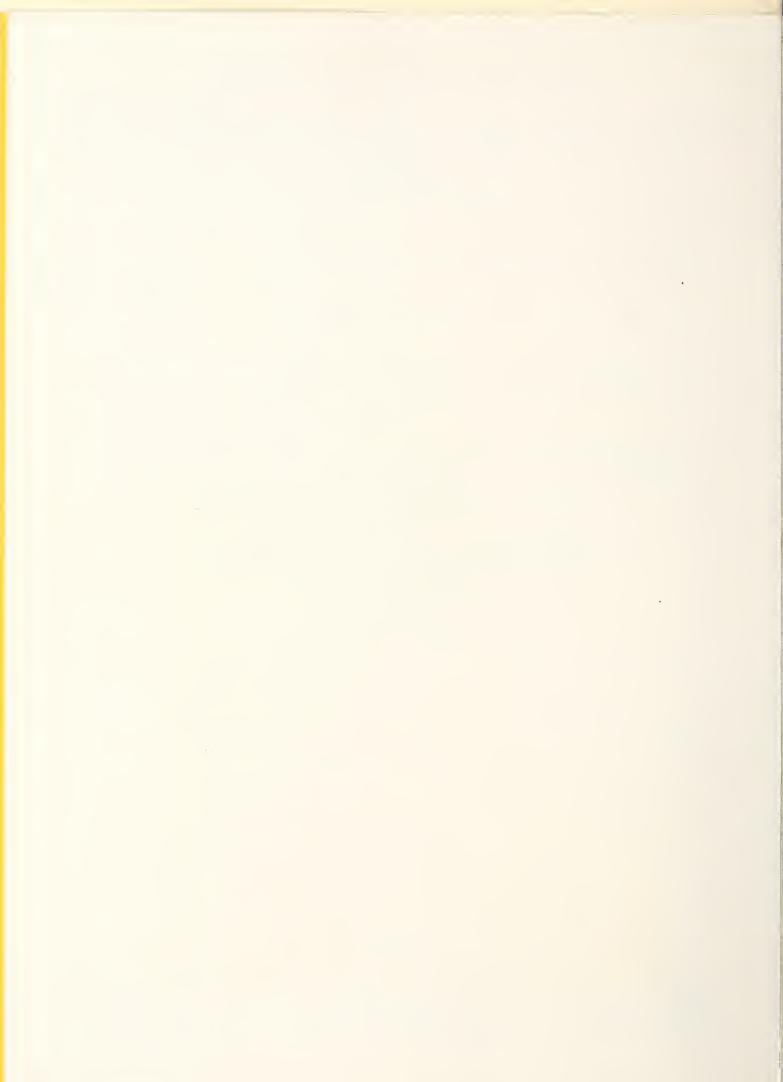
DR. D.W. THORNE

DIRECTOR

UTAH AGRICULTURAL

EXPERIMENT STATION

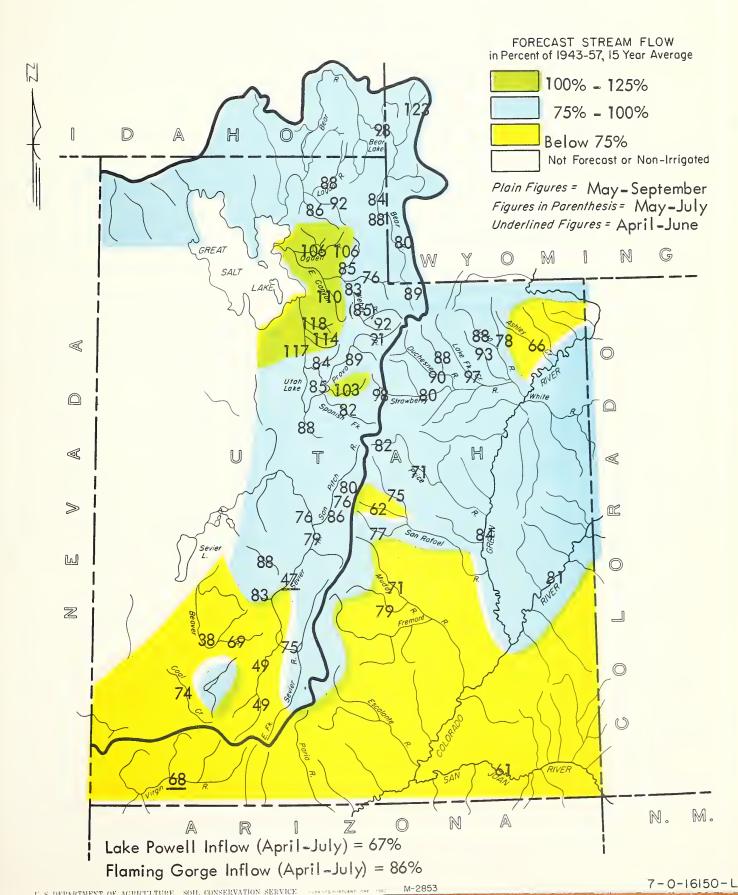
LOGAN, UTAH



PROSPECTIVE WATER SUPPLIES

Based on Snow Surveys Made on UTAH and BEAR RIVER WATERSHEDS







WATER SUPPLY OUTLOOK

as of

May 4, 1964

April's weather brought marked improvement in the water supply outlook for most areas of the State. Now, forecasts of the May-September streamflow for the majority of the streams in central and northern Utah varies between average and 75% of average.

Streams having the best outlook in the State, with forecasts ranging from average to 20% above average flow, include the Ogden River, East Canyon Creek near Morgan, Hobble Creek near Springville and the streams near Tooele, Farmington and Salt Lake.

Areas where the outlook is still poor - with forecasts ranging from about 50% to 75% of average - include the Upper Sevier River, the Virgin, Beaver, Paria, Escalante, Fremont and Muddy Rivers, Cottonwood Creek near Orangeville, Ashley and Brush Creeks near Vernal and the streams near Moab, Monticello and Blanding.

In southwestern Utah, the outlook for Parowan Creek is much better than surrounding areas. Here, streamflow is expected to be about 95% of average.

Inflow to the Sevier River between Kingston and Vermillion Dam - affecting the Richfield area - is expected to be only 47% of average. The expected inflow between Vermillion Dam and Gunnison for the March-June period is expected to be 79% of average, with most of this coming in the next two months. Inflow to Sevier Bridge Reservoir for the May-September period is forecast at 35,000 acre feet, or 76% of average.

Most forecasts range between about 85% and 95% of average for the Bear River and its tributary streams, the upper Weber, Provo, Uintah Basin streams from the Duchesne to Uinta Rivers, and for streams near Payson and Fillmore. Streams with forecasts ranging between about 75% and 85% of average include the Strawberry, Spanish Fork, San Pitch, Whiterocks and American Fork Rivers, Scofield Reservoir inflow, Huntington and Ferron Creeks, East Fork Sevier near Kingston, Clear Creek near Sevier and streams in the Salina to Gunnison area.

April snowfall varied from about 110% to over 250% of average. This, coupled with the cold temperatures, caused the snowpack to build up during the month at the majority of the snow courses. Ordinarily they show a considerable loss during the month, except at the highest elevations. This delayed snowmelt will have the effect of causing streamflow to hold up longer into the summer months than would otherwise be expected.



FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE b THIS YEAR AS PERCENT OF AVERAGE
	•	1		OF AVERAGE
CI	REAT BASI	N		
BEAR RIVER SYSTEM	ILAN DASI	14		
Bear nr Ut-Wyo. State Line Bear nr Woodruff Woodruff Crk nr Woodruff, Ut. Big Crk nr Randolph, Utah Bear nr Randolph Smith's Fork nr Border, Wyo. Bear at Harer, Idaho Little Bear nr Paradise Logan nr Logan (1) Blacksmith Fork nr Hyrum (2)	103 85 14 7 55 133 230 24 110 47	May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept	87 62 10.5 2.4 31.6 90 127 16.8 94 29.8	116 89 106 80 16.0* 88 8.3* 84 88 62 108 123 235 98 28 86 125 88 51 92
WEBER-OGDEN RIVERS				
Weber nr Oakley Wanship Reservoir Inflow(3) Weber nr Coalville (4) Chalk Crk at Coalville Lost Crk nr Croydon, Ut. East Canyon Crk nr Morgan (5) So. Fork Ogden nr Huntsville Pineview Reservoir Inflow (6)	86 112 94 99 26 12 20 52 82	May-June May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept May-July	78 98 85 90 16.7 8.6 7.9 39	96 90 122 92 110* 85 119 83 34 76 14.1 85 18.1 110 49 106 77 106
PROVO RIVER & UTAH LAKE				
Strawberry Reservoir Inflow (7) Spanish Fork at Thistle Payson Creek nr Payson Hobble Crk nr Springville Provo nr Hailstone (8) Provo at Vivian Park (9) American Fork nr American Fork Utah Lake Inflow	41 28 6 17 93 115 27 200	May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept May-Sept	26.2 16.4 10.2 86 100 24.1	42 98 34 82 6.8* 88 16.5* 103 102 * 91 129 89 32 84 234 85
JORDAN RIVER & SALT LAKE				
Little Cottonwood Crk nr SLC Big Cottonwood nr SLC Parley's Crk nr SLC	42 41 13	May-Sept May-Sept May-Sept	35 31 6.1	36 117 36 114 11 118

⁽¹⁾ Includes U.P.& L. Co. tailrace and Logan, Hyde Park & Smithfield Canal. (2) Above Utah Power & Light (1) Includes U.P.& L. Co. tailrace and Logan, Hyde Park & Smithfield Canal. (2) Above Utah Power & Light Company's dam. (3) Observed flow Weber River near Wanship, Utah, plus change in storage in Wanship Reservoir, plus diversion by Weber-Provo Canal. (4) Includes diversion by Weber-Provo Canal and change in storage in Wanship Reservoir. (5) Observed flow plus change in storage in East Canyon Reservoir. (6) Inflow record as computed by U.S. Bureau of Reclamation. (7) Change in storage plus diversion thru Strawberry tunnel. (8) Observed flow minus diversions thru Duchesne tunnel and Weber-Provo Canal. (9) Observed flow plus change in Storage in Deer Creek reservoir, minus diversions thru Duchesne tunnel & Weber-Provo Canal, plus diversion thru Salt Lake Aqueduct.



UTAH STREAMFLOW FORECASTS a (1,000 Ac. Ft.)

UIAN SIKEAMITUW FUNEGASIS (1,000 AC. Ft.	FORECAST	FORECAST	LAST	b	THIS YEAR
FORECAST POINT	THIS YEAR	PERIOD	YEAR		PERCENT
SEVIER RIVER					
Sevier at Hatch	14.5 22.5	May-June May-Sept	12.9 21.6	28 46	52 49
Sevier nr Circleville	16.5	May-Sept	15.3	34%	49
Sevier nr Kingston	2.5 5	May-June May-Sept	1.7 3.8	15.9 20.9	16 24
East Fork Sevier nr Kingston (10)	5	May - June	3.4	9.1	55
Sevier below Piute Dam (11)	10 19	May-Sept May-Sept	8.0 11.4	13.4 35	75 54
Clear Crk nr Sevier(abv. Div.)	10	May-June	4.7	12.1*	83
Inflow Kingston to Vermillion Dam	22	Apr-June		47	47
Vermillion Dam to Gunnison	50	Mar-June		63	79
Salina Crk at Salina (12) Sevier nr Gunnison a	7.8 35	May-June May-Sept	0.5 15.4	8.2* 46	95 76
Chalk Creek nr Fillmore	14	May-Sept	6.2	16*	88
SAN PITCH RIVER					
Pleasant Crk nr Mt. Pleasant	8	May-Sept	6.2	10.0	80
Twin Crk nr Mt. Pleasant	3.8 12.8	May-Sept May-Sept	3.5	5.0 14.8	76 96
Ephraim Crk nr Ephraim	12.0	nay - sept		17.0	86
BEAVER RIVER					
Beaver nr Beaver	13	May - June	9.2	18.9	69
Rockyford Reservoir Inflow (13)	18 3	May-Sept May-June	13.0 0.6	26 8.0	69 38
Rockyrold Reservoir Illinow (13))	riay - ourie	0.0	0.0	30
COAL CREEK					
Coal Crk nr Cedar City	10	May-Sept	7.4	13.5	74
C	OLORADO R	IVER BASIN			
GREEN RIVER TRIBUTARIES IN UTAH					
FLAMING GORGE TO DUCHESNE RIVER					
Henry's Fork at Linwood	26	May-Sept		34	76
Ashley Creek nr Vernal	37	May-Sept	33	56	66
DUCHESNE RIVER					
Duchesne at Provo River					
(Trail nr Hanna) Duchesne nr Tabiona (14)	35 94	May-Sept May- S ept	, 91	40* 105	88 90
Rock Crk nr Mtn. Home	92	May-Sept	90	104	88

(10) Observed flow plus change in storage in Otter Creek Reservoir. (11) Observed flow plus change in storage in Otter Crk & Piute Reservoirs. (12) Gage is below diversions near Salina. (13) Observed flow at Rockyford Dam, corrected for change in storage in Rockyford Reservoir. (14) Observed flow plus diversion through Duchesne Tunnel. (15) Observed flow plus change in storage in Moon Lake Reservoir.



OTAH STREAMILOW FOREGASTS (1,000 AC. Ft.)											
FORECAST POINT	FORECAST THIS YEAR	FORE CAST PERIOD	LAST YEAR		THIS YEAR AS PERCENT OF AVERAGE						
<i>J.</i>											
DUCHESNE RIVER - continued											
Strawberry at Duchesne Lakefork below Moon Lake (15) Uinta nr Neola Whiterocks nr Whiterocks Yellowstone nr Altonah	52 72 84 50 70	May-Sept May-Sept May-Sept May-Sept May-Sept	36 72 88 53 71	65 74 96 64 75	80 97 88 78 93						
PRICE RIVER											
Gooseberry Crk nr Scofield Scofield Reservoir Inflow (16) Price nr Heiner (16)	9.5 28 40	May-Sept May-Sept May-Sept	9.4 22.8 27.0	11.4 34 56	83 82 71						
SAN RAFAEL RIVER											
Huntington Crk nr Huntington Cottonwood Crk nr Orangeville Ferron Crk nr Ferron	40 35 30	May-Sept May-Sept May-Sept	37 29.2 31.3	53 56 39*	75 62 77						
MUDDY RIVER											
Muddy Creek nr Emery Ivie Creek abv. Div. nr Emery	15	May-Sept May-Sept	13.8	21.0% 1.5%							
VIRGIN RIVER											
Virgin at Virgin	30	Apr-June	18.0	44	68						
UPPER COLORADO BASIN											
Flaming Gorge Inflow (17) 1, Green at Green River, Utah (17) 2, San Juan nr Bluff, Utah (18)	,900 ,100 ,590 640 ,400	May-Sept Apr-July May-Sept May-Sept Apr-July	1310 645 1624 434 3679	3602 1285 3080 1044 8100	81 86 84 61						

⁽a) Observed flow at Lee's Ferry plus change in storage in Flaming Gorge, Navajo, Lake Powell and Big Sandy.

GENERAL FOOTNOTES

⁽¹⁶⁾ Observed flow plus change in storage in Scofield Reservoir. (17) Observed flow plus change in storage in Flaming Gorge and Big Sandy Reservoirs. (18) Observed flow plus change in storage in Navajo Reservoir.

⁽a) Runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. The discharge data is taken from preliminary records of the U.S. Geological Survey. (b) 1943-57, 15 year period. *Partly estimated.



BASIN OF STREAM

RESERVOIR

USABLE
CAPACITY

THIS YEAR
LAST YEAR AVERAGE 4

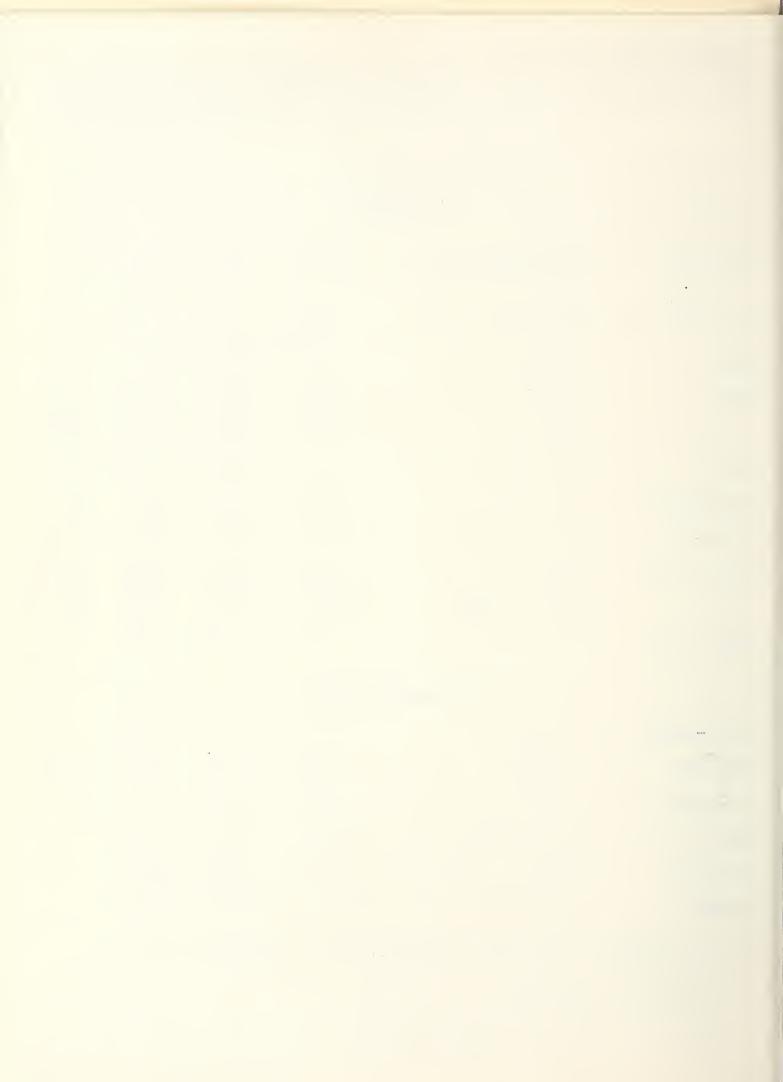
May 1, 1964

GREAT BASIN

Bear River	Bear Lake Woodruff Narrows	1421.0 26.5	802.9 26.2	804.2 25.5	921.5
Little Bear	Hyrum Porcupine	15.3 11.3	15.3	15.3 6.5	14.6
<u>Ogden</u>	Pineview	110.0	60.3	94.1	29.3
<u>Weber</u>	Rockport Echo East Canyon	60.9 73.9 28.7	35.1 53.5 25.0	34.7 55.2 24.0	 54.8 23.8
Provo	Deer Creek	149.7	102.3	120.3	94.9
Spanish Fork	Strawberry	270.0	64.1	64.1	150.1
Utah Lake	Utah Lake (b)	1149.0	395.2	348.4	691.1
Sevier River	Otter Creek Piute Sevier Bridge	52.5 74.0 236.1	24.5 23.7 65.6	25.4 17.5 73.3	41.4 53.1 169.2
Beaver River	Rocky Ford	23.3	8.5	9.3	17.0
	COLORADO RIV	ER DRAINAGE			
Ashley Creek	Steinaker	33.3	11.5	16.6	
Lake Fork	Moon Lake	35.8	22.9	18.7	15.5
Price River	Scofield	65.8	15.2	21.9	23.9
Green	Flaming Gorge	3789.0*	945.3	165.3	
San Juan	Navajo	1709.0*	372.6	217.0	
Colorado	Lake Powell	27,000.0	2,656.0	697.0	

All data contained in this table supplied by the U.S. Geological Survey

^{* -} Total capacity reported



GREAT BASIN DRAINAGE

UPPER BEAR RIVER (Above Harer, Idaho)							
Big Park Burts-Miller Ranch CCC Camp x Hayden Fork Kelly Ranger Station Monte Cristo R. S. Piney LaBarge x Poison Meadows x Salt River Summit x Stillwater Camp Trial Lake x	10G11 10J6 10G7 10J7 10G12 11H12 10G10 10G6 10G8 10J17 10J8	8700 7900 7500 9300 8200 8960 8820 8500 7900 8550 9800	4/27 5/1 4/27 5/1 4/27 4/28 4/28 4/28 4/27 5/1 4/29	68 7 37 50 61 73 54 91 46 29 75	21.2 2.8 12.3 18.0 19.4 27.1 19.1 31.0 16.3 11.2 24.9	20.6 0.0 7.8 17.6 16.3 27.3 20.0 30.7 14.2 8.0 28.2	20.1b 0.5b 6.0* 14.6b 16.0b 24.8b 15.2* 31.2b 10.8* 5.5b 28.7b
LOWER BEAR RIVER (Below Harer, Idaho)							
Beaver Crk-Skunk Crk. Dry Bread Pond x Emigrant Summit Garden City Summit Klondike Narrows Little Bear(lower) Little Bear(upper) Monte Cristo R. S. Oxford Mountain Steep Hollow #1 Steep Hollow #2 Strawberry Creek Strawberry Mink Divide Tony Grove R. S. Willow Flat	11H14 11H13 11G6 11H7 11H1 11H26 11H25 11H12 12G3 11H27 11H28 11G9 11G10 11H3 11G4	7150 8230 7700 7600 7400 6100 6850 8960 6800 8500 7700 5800 6800 6250 6100	4/28 4/29 4/30 4/30 4/28 4/28 4/28 4/30 4/30 5/1 5/4 4/30 5/1	22 48 59 43 38 0 11 73 Report 92 57 12 40 3	8.6 18.0 24.6 16.2 17.3 0.0 5.3 27.1 37.2 24.9 5.3 16.6 1.4 6.2	3.1 19.5 16.8 15.8 13.8 0.0 0.9 27.3 0.9 33.8 24.0 0.0	3.1b 13.6b 13.5b 13.0b 0.1b 0.9b 24.8b 31.4b 16.8b 1.7* 15.0* 0.4b 3.0*
OGDEN RIVER							
Beaver Crk-Skunk Crk. Ben Lomond(lower) Ben Lomond Peak Ben Lomond Trail Cutler Creek Dry Bread Pond Horse Ridge Monte Cristo R.S. Sagebrush Flat	11H14 11H9 11H8 11H30 11H29 11H13 11H21 11H12	7150 5850 8000 6000 6780 8230 8260 8960 6300	4/28 4/29 4/29 4/29 4/29 4/28 4/27 4/28 4/28	22 18 80 18 55 48 62 73 0	8.6 8.9 33.6 7.4 24.8 18.0 22.6 27.1 0.0	3.1 2.2 34.3 2.2 22.2 19.5 22.0 27.3 0.0	3.1b 3.0b 30.5b 13.6b 24.8 0.0



WEBER RIVER						
Beaver Creek R.S. 11J24 Chalk Creek #1 11J1 Chalk Creek #2 11J2 Chalk Creek #3 11J3 Farmington Canyon(lower)11J12 Farmington Canyon(wpper) 11J11 Horse Ridge 11H21 Kilfore Creek 11H31 Lamb's Canyon x 11J14 Lost Creek Reservoir 11H32 Parley's Canyon Smt. 11J15 Redden Mine(lower) 11J6 Redden Mine(upper) 11J5 Silver Lake x 11J16 Smith & Morehouse 11J4 Trial Lake x 10J8	7500 9100 8000 7500 6950 8000 8260 7300 6600 6125 7500 8500 9000 8725 7600 9800	4/29 4/27 4/27 4/27 5/1 5/1 4/27 4/27 4/29 4/27 5/2 4/30 4/30 4/27 4/28 4/29	8 73 52 24 56 76 62 34 32 0 58 44 52 77 32 75	3.0 23.8 16.2 6.5 24.5 28.7 22.6 11.1 12.0 0.0 19.1 17.5 20.0 26.2 12.1 24.9	2.4 30.2 15.5 2.7 20.6 29.9 22.0 10.8 7.8 0.0 14.1 17.8 20.0 26.8 7.1 28.2	0.9b 23.7b 11.1b 1.3b 19.6b 28.9b 5.7b 10.2b 15.1b 17.0b 24.9b 5.0b 28.7b
PROVO RIVER & UTAH LAKE						
Camp Altamont 11J20 Clear Creek Ridge #1 11K21 Clear Creek Ridge #2 11K22 Clear Creek Ridge #3 11K23 Daniels-Strawberry Smt.11J23 Dutchman R.S. 11J17 Hobble Creek Summit 11J22 Packard Canyon 11J31 Payson R. S. 11K1 Rock Bridge 11K2 Soapstone R.S. 11J25 Timpanogos Divide 11J21 Trial Lake 10J8	7300 9200 8000 6600 8000 7500 7300 6400 8050 6750 7800 8140 9800	4/29 4/28 4/28 4/27 4/27 4/27 4/27 4/27 4/27 4/29 4/29 4/29	19 47 30 0 33 27 30 11 41 25 28 48 75	8.4 17.6 10.0 0.0 11.7 12.1 11.8 4.1 15.6 9.8 11.1 18.9 24.9	5.0 15.4 5.0 0.0 9.8 12.4 5.6 1.9 11.4 2.9 8.4 21.0 28.2	5.4b 15.2b 7.4b 0.1b 7.5b 7.3b 4.4b 0.6b 11.2b 3.8b 4.3b 18.7 28.7b
JORDAN RIVER & TOOELE VALLEY						
Bevan's Cabin 12J2 Lamb's Canyon 11J14 Middle Canyon-Tooele 12J3 Mill D South Fork 11J10 Parley's Canyon Smt.x 11J15 Rocky Basin-Setlmt.Cyn. 12J1 Silver Lake 11J16	6450 6600 7000 7400 7500 8900 8725	4/30 4/29 4/28 4/27 5/2 4/30 4/27	18 32 40 61 58 70	7.4 12.0 16.3 21.3 19.1 27.4 26.2	1.8 7.8 4.2 17.4 14.1 23.2 26.8	1.5b 5.7b 5.3b 11.4b 10.2b 23.2b 24.9b



SNOW	CUF	RENT INFOR	MATION	PAST R	ECORD		
DRAINAGE BASIN and SNOW COURSE		DATE OF	SNOW DEPTH	WATER	WATER CONTENT (Inches)		
NAME	NO.	ELEVATION	SURVEY	(Inches)	CONTENT (Inches)	LAST YEAR	AVERAGE a

UPPER SEVIER RIVER (South of Richfield, Ut	<u>ah)</u>						
Big Flat x Box Creek Castle Valley Cedar Breaks Duck Creek R. S. Fish Lake Harris Flat R.S. Kimberly Mine Midway Valley Panguitch Lake Squaw Springs Widtsoe-Escalante Smt. Widtsoe-Escalante #2 Widtsoe-Escalante #3	12L7 12L4 12M13 12M1 12M4 11L3 12M5 12L6 12M2 12M7 12L5 11M1 11M2 11M3	10290 9800 9700 10390 8560 8700 7700 8900 9800 9200 9300 9500 9500	4/27 4/28 4/28 4/27 4/27 4/27 4/27 4/28 4/29 4/30 4/30 4/30	51 29 20 45 17 2 0 44 48 0 8 9 19 24	16.0 10.2 7.2 16.3 6.8 0.7 0.0 16.7 17.6 0.0 2.7 3.3 6.6 8.5	14.2 7.9 6.6 16.8 2.0 0.0 0.0 8.8 16.8 0.0 0.8 2.0 6.0 9.9	19.2b 10.1b 5.6b 17.0b 4.3b 2.3b 0.4b 12.5b 18.8b 0.0b 2.5b 1.9b 4.8b 6.3b
LOWER SEVIER RIVER (Including San Pitch Ri	ver)						
Beaver Dams Farnsworth Lake G.B.R.C. Headquarters G.B.R.C. Meadows Gooseberry R. S. Gooseberry Reservoir x Mammoth R.SCtnwd. Crk Mt. Baldy R.S. Pine Creek Shingle Mill	11K13 11L1 11K11 11K10 11L2 11K4 11K3 11K12 12L1	8000 9900 8700 10000 8400 8700 8800 9500 8700 6200	4/27 4/29 4/30 4/30 4/29 4/28 4/28 4/27 4/29	26 55 40 66 27 52 52 59 36	9.6 22.1 16.2 25.2 11.3 20.0 20.4 20.0 15.4 4.1	8.1 15.9 14.3 29.7 6.0 18.2 18.4 23.2 8.2 0.0	5.8b 18.4b 14.3b 27.3b 6.5b 17.6b 17.6b 23.2b 11.6b 0.3b
BEAVER RIVER							
Big Flat Merchant's Valley Otter Lake	12L7 12L9 12L8	10000 8200 9300	4/27 4/27 4/27	51 10 36	16.0 3.6 11.2	14.2 1.8 9.8	19.2b 3.1b 13.5b
PAROWAN CREEK							
Ed Ward Flat Yankee Reservoir	12M12 12M11	8300 8700	4/29 4/29	9 23	2.9 8.2	0.0 2.1	1.0b 4.8b
COAL CREEK							
Cedar Breaks Midway Valley x Urie Flat Webster Flat (a) 1943-57, 15 year per tion: Water content estim	12M1 12M2 12M10 12M3 iod. (b) Av	10390 9800 8450 9200 erage of all po timated 1943-57	4/28 4/28 4/28 4/28 4/28 15 year aver	45 48 0 32) Adjacent o	16.3 17.6 0.0 12.9 drainage. (A)	16.8 16.8 0.3 Aeridi*observa-	17.0b 18.8b 0.8b 8.7b



COLORADO RIVER DRAINAGE

UPPER GREEN RIVER IN UTAH

(Tributaries above Flaming Gorge)

		3-7					
Buck Pasture A East Fk.Black's Fk.G.S. Henry's Fork A Hewinta Guard Station Hickerson Park	10J24 10J4 9J8 9J7		Dela 4/24	yed Repo 45 33 58	12.8 ort 13.1 8.8	8.3 15.3A 8.7 9.8A 10.8 3.0 9.8	
BRUSH CREEK							
Kings Cabin(lower) Kings Cabin(upper)	9J2 9J1		4/23 4/23	19 29	6.4 8.5	4.4 8.0	4.5b 6.5b
DUCHESNE RIVER							
Julius Park Lakefork Basin Lakefork Mountain Lakefork Mountain #2 Lakefork Mountain #3 Mosby Mountain Paradise Park Reynolds Park A	10 J27 9 J9 1 I J23	11000 9100 9800 11100 10500 8900 8100 9500 10100 10400 7800 9800 8600	Delay Delay 4/27 Delay 4/28 4/27 Delay 4/28 4/28 4/27 4/27 4/27 Delay 4/29 4/29 5/1	yed Repo 33 42 yed Repo 42 12 3 33 37 yed Repo 28	11.7 11.7 11.7 12.6 12.9 4.1 0.9 9.0 9.9 ort 11.1 24.9 12.6	28.2	7.5b 7.6b 10.5b 10.8b 2.3b 0.3b 8.4b 11.0b 4.3b 28.7b 8.1b
PRICE RIVER							
Corral Dry Valley Divide Gooseberry Reservoir Grassy Trail Crk-Left Fk Indian Canyon x Mammoth R.SCtnwd.Crk.x Mud Creek #2	10K1	8200 7800 8700 7970 9100 8800 8300	4/30 4/28	Report	5.2 20.0 11.7 20.4 8.5	0.0 1.4 18.2 0.0 8.3 18.4 6.4	4.2b 17.6b 7.6b 17.6b 6.9b

Timberline

10K6 9100

No Report

7.7

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1943-57, 15 year average.



DRAINAGE BASIN and SNOW COURSE		DATE OF SNOW DEPTH WATER			WATER CONTENT (Inches)		
NAME	NO.	ELEVATION	SURVEY	(Inches)	CONTENT (Inches)		ERAGE a
p) ²							
PRICE RIVER - Continued							
White River #1 White River #2 White River #3	10K2 11K24 11K25	8600 7600 7400	5/1 5/1 5/1	35 7 0	12.6 2.1 0.0	8.2 0.8 0.0	8.1b 0.8b 0.2b
SAN RAFAEL RIVER							
Buck Flat Gooseberry Reservoir Mammoth R.SCtnwd.Crk.: Red Pine Ridge Rush Pond Seely Creek R.S. Stuart R. S. Switchback Upper Joe's Valley Wrigley Creek	11K31 11K4 × 11K3 11K28 11K38 11K9 11K27 11K26 11K29 11K32	9400 8700 8800 9400 9800 10000 7950 8600 8800 9000	4/27 4/28 4/28 4/28 4/27 4/30 4/29 4/29 4/28 4/27	40 52 52 38 31 33 Trace 38 13 20	13.4 20.0 20.4 14.4 9.1 12.7 Trace 15.3 3.8 5.9	17.1 18.2 18.4 14.1 11.5 21.2 0.0 12.2 4.4 7.2	16.2b 17.6b 17.6b 13.8b 11.3b 17.1b 1.4b 12.2b 4.8b 6.0b
MUDDY RIVER							
Mt. Baldy R. S. x	11K12	9500	4/27	59	20.0	23.2	23.2b
FREMONT RIVER							
Black's Flat-U.M. Crk. Farnsworth Lake x Fish Lake Johnson Valley	11L4 11L1 11L3 11L6	9250 9900 8700 8850	4/27 4/29 4/27 4/27	21 55 2 12	7.6 22.1 0.7 4.0	4.7 15.9 0.0 0.0	8.0b 18.4b 2.3b 2.2b
ESCALANTE RIVER							
Widtsoe-Escalante Smt. Widtsoe-Escalante #2 Widtsoe-Escalante #3	11M1 11M2 11M3		4/30 4/30 4/30		3.3 6.6 8.5	2.0 6.0 9.9	1.9b 4.8b 6.3b
VIRGIN RIVER							
Cedar Breaks x Duck Creek R.S. Harris Flat R.S. Midway Valley x Webster Flat	1 2M1 1 2M4 1 2M5 1 2M2 1 2M3	-	4/28 4/27 4/27 4/28 4/28	45 17 0 48 32	16.3 6.8 0.0 17.6 12.9	16.8 2.0 0.0 16.8 7.1	17.0b 4.3b 0.4b 18.8b 8.7b
SOUTHEASTERN UTAH DRAIN.	AGE S						
Buckboard Flat Camp Jackson LaSal Mountain LaSal Mountain tion: Water content estima	9M1 9M2 9L1 od. (8)L2ve ited. * Est	9000 8600 8800 rag600all pas imated 1943-57,	4/23 4/23 4/24 t ret/24 15 year ave	14 15 x) Ad 35ent d	4.5 3.4 4.1 rainage.4 _(A)	0.5 0.6 0.0 Aeria 5 ob 9 erva-	5.0b 1.8b 1.1b 10.0b

CURRENT INFORMATION

PAST RECORD

SNOW



DRAINAGE BASIN		CURRE	NT INFORMAT	TION	FROM AP	PROX. 10/1 T	O DATE
AND RAIN GAGE LOCATION	ELEVATION	DATE OF READING	MONTH'S PRECIPITATION	1943 — 57 AVERAGE	THIS YEAR	1943 — 57 AVERAGE	PERCENT OF AVERAGE

a GREAT BASIN DRAINAGE UPPER BEAR RIVER (Above Harer, Idaho) 4/27 Chalk Creek #2* 8000 4.64 2.58 20.36 20.93 97 4/27 3.94 7500 16.87 Chalk Creek #3* - -4/28 5.81 Monte Cristo #2 8960 28.88 4/27 2.15 Salt River Summit 7900 3.30 18.63 22.17 84 5/1 Stillwater Camp 8550 4.76 2.26 16.32 17.26 95 4/29 6.40 22.80 Trial Lake * 9800 3.12 27.68 82 LOWER BEAR RIVER (Below Harer, Idaho) 4/28 26.84 4.62 3.54 8230 23.25 87 Dry Bread Pond 4/30 Garden City Summit 7600 3.22 3.00 20.16 21.50 94 4/30 4.31 3.95 Klondike Narrows 7400 26.32 27.00 97 4/28 Little Bear(upper) 6850 3.63 3.40 18.54 23.40 79 4/28 Monte Cristo #2 8960 5.81 - -28.88 Tony Grove R.S. (SCS) 6250 4/30 2.88 - -17.39 Willow Flat 6100 5/1 21.80 3.60 3.95 28.22 77 OGDEN RIVER 4/29 3.65 5850 3.67 26.16 86 Ben Lomond(lower) 30.29 4/29 6000 3.92 27.17 Ben Lomond Trail - -4/28 15.78 5500 2.61 Causey Dam 4/28 4.62 26.84 8230 3.54 23.25 87 Dry Bread Pond 4/27 7.55 27.64 Horse Ridge 8260 - -4/28 5.81 - -28.88 Monte Cristo #2 * 8960 15.04 18.10 4/28 2.57 2.50 83 Sagebrush Flat 6300 WEBER RIVER 20.36 4/27 4.64 2.58 20.93 97 8000 Chalk Creek #2 16.87 7500 4/27 3.94 - -Chalk Creek #3 4.85a - -35.17a - -No Report Farmington Guard Sta.(1) 7500 4.80a 31.47 32.39a 97 7000 5/1 8.41 Farmington Rice (1) 4/27 27.64 7.55 8260 Horse Ridge 4/27 3.04 - -10.77 Lost Creek Reservoir 6125 4/30 2.59a 16.61 16.03a 104 4.85 5500 Mt. Dell Dam(2)* 5/2 8.15 3.89 28.19 24.97 113 7500 Parley's Canyon Smt. 34.11a 87 4/30 4.00a 29.64 6.55 Silver Lake(Brighton)*(2) 8725 4/28 4.90 3.10 20.89 21.75 96 7600 Smith & Morehouse 27.68 Trial Lake * 6.40 3.12 22.80 82 9800 4/29

⁽¹⁾ Data supplied by U.S.Forest Service

^{*} Adjacent Drainage

⁽²⁾ Data supplied by U.S.WB

a All values estimated except those where symbol "a" occurs.



DRAINAGE BAGIN		CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE				
DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	DATE OF READING	MONTH'S PRECIPITATION	1943 — 57 AVE RAGE	THIS YEAR	1943 - 57 PERCE	ENT OF		
7									
PROVO RIVER & UTAH LAKE				a		а			
Clear Creek Ridge #2	8000	4/28	4.02	2.70	16.17	19.83	82		
Daniels-Strawberry Smt. Dutchman R.S.	8000 7 5 00	4/27	4.00	2.50	18.97	21.03	90		
East Portal Ridge	7800 7800	4/29 5/1	5.85 4.15	3.20 	21.19 19.24	30.82 	69		
Hobble Creek Smt.	7300	5/ 1 4/27	4.03	3.70	18.47	20.82	89		
Payson R. S.	8050	4/27	3.98	3.53	21.42	21.58	99		
Soapstone R. S.	7800	4/29	4.70	3.00	20.71	20.90	99		
Strawberry ResEast Porta Timpanogos Divide	8200	5/1	2.65	1.73 3.05a	11.04	11.16 31.53a	99		
Trial Lake	9800	4/29 4/29	5.00 6.40	3.12	24.91	27.68	79 82		
		1/ 2)	0.10		22.00		02		
JORDAN RIVER & TOOELE VALL	EY								
Middle Canyon	7000	4/28	5.20	3.54	24.32	21.24	114		
Mt. Dell Dam(2)	5500	4/30	4.85		16.61	16.03a	104		
Parley's Canyon Smt. Silver Lake(Brighton)(2)	7500 8725	5/2 4/30	8.15	3.89	-	24.97	113		
Silver Lake(Brighton)(2)	0/25	4/ 30	6.55	4.00a	29.64	34.11a	87		
SEVIER RIVER ABOVE RICHFIE	SEVIER RIVER ABOVE RICHFIELD								
Big Flat *	10290	4/27	5.62	3.14	15.77	22.14	71		
Box Creek	9800	4/28	3.25	3.35	13.75	18.85	73		
Castle Valley Cedar Breaks	9700 10390	4/29 4/28	3.97 5.74	3.10	14.63 18.22	16.56	88		
Duck Creek R. S.	8560	4/27	5.43	4.23	18.38	22.75	81		
Fish Lake	8700	4/27	1.80	1.53	8.15	8.00	102		
Kimberly Mine	8900	4/27	5.60	4.32	22.91	23.72	97 65		
Panguitch Lake Webster Flat *	8200 9200	4/29 4/28	1.38 5.87	2.33 4.50	6.15 19.25	9.50 24.50	65 79		
Widtsoe-Escalante #3	9500	4/30	4.49	2.00	13.25	14.79	90		
Widtsoe R. S.	7600	4/30	1.34	0.82a	4.34	6.06a	72		
SEVIER RIVER BELOW RICHFIE	LD								
(Including San Pitch River)								
Beaver Dams	8000	4/27	4.00	2 .5 7	13.76	17.50	79		
Farnsworth Lake	9900	4/29	5.15	4.00	24.22	23.00	105		
G.B.R.C. Headquarters(1)	8700	4/30	5.42	3.80a		22.56a	82		
G.B.R.C. Meadows(1) G.B.R.C. Oaks(1)	10000 76 <i>55</i>	4/30 4/30	5.15 4.10	3.82a	23.49	23.46a 15.62a	100 89		
Gooseberry R.S.(1)	7800	4/29	4.12	2.80	16.45	14.90	110		
Gooseberry Reservoir *	8700	4/28	4.57	3.15	19.17	21.45	89		
Mammoth R.S. #2 *	8600	4/28	5.12	3.12	21.17 16.88	21.27	100		
Mt. Baldy R.S. Pine Creek	9500 8700	4/27 4/29	4.90 6.35	 5.57	25.58	 29.13	88		
Shingle Mill	6200	4/29	4.45		17.27				

⁽²⁾ Data supplied by U.S. WB
a All values estimated except
those where symbol "a" occurs.



PRECIPITATION DATA (Inches)

DRAINAGE BASIN	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
AND RAIN GAGE LOCATION	ELEVATION	DATE OF READING	MONTH'S PRECIPITATION	1943 — 57 AVERAGE	THIS YEAR		ENT OF ERAGE
BEAVER RIVER				a		а	
Beaver Canyon P.H. (2) Big Flat	727 <i>5</i> 10290	4/30 4/27	3.34 5.62	2.00a 3.14	8.69 15.77	12.80a 22.14	68 71
PAROWAN CREEK							
Yankee Reservoir	8700	4/29	3.90	2.77	14.30	15.20	94
COAL CREEK							
Cedar Breaks Webster Flat *	10390 9200	4/28 4/28	5.74 5.87	 4.50	18.22 19.25	 24.50	 79
ENTERPRISE TO NEW HARMONY	DRAINAGE						
Little Grassy Creek Long Flat	6100 8000	4/27 5/1	2.72 3.55	2.70 2.75	11.02 12.55	15.84 16.84	70 74
UPPER GREEN RIVER IN UTAH (Tributaries above Flaming	COLORADO Gorge)	RIVER	DRAINAGE				
Black's Fork Jct. E.F. Black;s Fk. G.S. Hewinta G.S. Spirit Lake	8925 9300 9500 10300	4/24 4/24 4/24 4/24	4.25 4.10 4.66 5.70	 	14.16 15.44 15.74 18.40		
BRUSH CREEK							
Kings Cabin(upper)	8730	4/23	4.00	2.17	10.75	15.73	68
DUCHESNE RIVER							
Currant Creek Daniels-Strawaerry Smt. * East Portal Ridge * Indian Canyon Julius Park Lakefork Mountain Moon Lake Paradise Park Rock Creek Soapstone R.S. * Strawberry ResE.Portal* Trial Lake* White River #1	7800 8000 7800 9100 9800 10500 8150 10100 7900 7800 7606 9800 8600	4/29 4/27 5/1 4/28 4/27 4/28 4/30 4/27 4/28 4/29 5/1 4/29 5/1	3.55 4.00 4.15 4.85 4.50 4.85 3.10 4.70 3.90 4.70 2.65 6.40 5.70	1.80 2.50 2.20 2.26 1.27a 2.36 1.33 3.00 1.73 3.12 2.11	13.70 18.97 19.24 12.70 11.92 14.30 7.75 13.00 12.35 20.71 11.04 22.80 16.45	15.14 21.03 17.36 16.66 10.34a 18.61 14.13 20.90 11.16 27.68 18.42	90 90 69 86 75 70 87 99 99 82

⁽¹⁾ Data supplied by U.S.Forest Service
 * Adjacent Drainage

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those where symbol "a" occurs.



PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1943 — 57 AVERAGE	THIS YEAR	1943 — 57 P	ERCENT OF AVERAGE
				a		a	
PRICE RIVER							
Clear Creek Ridge #2 * Gooseberry Reservoir Indian Canyon Mammoth R.S. #2 Mud Creek White River #1	8000 8700 9100 8600 8300 8600	4/28 4/28 4/28 4/28 4/30 5/1	4.02 4.57 4.85 5.12 3.95 5.70	2.70 3.15 3.12 2.31 2.11	16.17 19.17 12.70 21.17 15.65 16.45	19.83 21.45 21.27 18.51 18.42	82 89 100 85 89
SAN RAFAEL RIVER							
Buck Flat Gooseberry Reservoir * Red Pine Ridge Stuart R.S.	9400 8700 9400 79 <i>5</i> 0	4/27 4/28 4/28 4/29	5.05 4.57 4.45 2.95	3.15 3.15 3.88 2.27	15.95 19.17 18.00 11.15	20.15 21.45 23.88 16.54	79 89 75 67
MUDDY RIVER							
Mt. Baldy R.S. *	9500	4/27	4.90		16.88		
FREMONT & ESCALANTE RIVER	<u>S</u>						
Black's Flat-U.M. Creek Farnsworth Lake * Fish Lake Widtsoe-Escalante #3	9250 9900 8700 9500	4/27 4/29 4/27 4/30	3.45 5.15 1.80 4.49	2.37 4.00 1.53 2.00	11.40 24.22 8.15 13.25	14.37 23.00 8.00 14.79	79 105 102 90
VIRGIN RIVER							
Duck Creek R.S. Webster Flat	8560 9200	4/27 4/28	5.43 5.87	4.23 4.50	18.38 19.25	22.75 24.50	81 7 9
SOUTHEASTERN UTAH DRAINAGE	<u>s</u>						
Buckboard Flat Camp Jackson LaSal Mountain(upper)	9000 8600 9600	4/23 4/23 4/24	2.90 3.15 3.55	4.00 3.30 3.54	13.68 11.05 14.85	23.00 18.31 22.54	59 60 66

⁽¹⁾ Data supplied by U.S.Forest Service (2) Data supplied by U.S. WB

* Adjacent Drainage a All values estimated except those where symbol "a" occurs.



Agencies Cooperating in Utah Snow Surveys

U.S. GOVERNMENT AGENCIES

- U.S. Department of Agriculture Soil Conservation Service Forest Service
- U.S. Department of Commerce Weather Bureau
- U.S. Department of Interior
 Bureau of Reclamation
 Geological Survey
 National Park Service

STATE AGENCIES

Utah Agricultural Experiment Station
Utah Fish and Game Department
Utah State Engineer
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner
Utah Water and Power Board

MUNICIPALITIES

Manti Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

Kaiser Steel Corporation

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE 222 S.W. TEMPLE SALT LAKE CITY. UTAH

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